



Conservative dentistry and endodontics

1. IMPRINT	
Academic year	2025/2026
Department	Conservative Dentistry
Field of study	English Dentistry Division
Main scientific discipline	Medical sciences
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time program
Type of module / course	Obligatory
Form of verification of learning outcomes	Completion
Educational Unit / Educational Units	Department of Conservative Dentistry Medical University of Warsaw Binieckiego str 6, 02-097 Warsaw, tel.: +48 22 116 64 46 e-mail: sekretariat.zachowawcza@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Department of Conservative Dentistry Prof. Agnieszka Mielczarek PhD, DDS agnieszka.mielczarek@wum.edu.pl
Course coordinator	Prof. Agnieszka Mielczarek PhD, DDS agnieszka.mielczarek@wum.edu.pl
Person responsible for syllabus	Anna Kwiatkowska, DDS Kanna.kwiatkowska@wum.edu.pl
Teachers	Department of Conservative Dentistry: prof. Agnieszka Mielczarek DDS, PhD - agnieszka.mielczarek@wum.edu.pl Aniela Brodzikowska DDS, PhD - aniela.brodzikowka@wum.edu.pl Joanna Rudnicka DDS, PhD - joanna.rudnicka@wum.edu.pl Ewa Rusyan DDS, PhD - ewa.rusyan@wum.edu.pl Marta Ciechowicz DDS - marta.ciechowicz@wum.edu.pl Anna Haładyj DDS - anna.haladyj@wum.edu.pl Paulina Korzeniewska DDS - paulina.korzeniewska@wum.edu.pl Juliusz Kosewski DDS - juliusz.kosewski@wum.edu.pl Anna Kwiatkowska DDS - anna.kwiatkowska@wum.edu.pl Konrad Michałowski DDS - konrad.michalowski@wum.edu.pl

Magdalena Sobecka-Frankiewicz DDS - magdalena.sobecka-frankiewicz@wum.edu.pl lek. dent. Katarzyna Więcek DDS - katarzyna.wiecek@wum.edu.pl Aneta Zduniak DDS – aneta.zduniak@wum.edu.pl Przemysław Zwierz DDS - przemyslaw.zwierz@wum.edu.pl			
2. BASIC INFORMATION			
Year and semester of studies	III year, V and VI semesters	Number of ECTS credits	9
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
lecture (L)		26 On line – eWUM Platform	1
seminar (S)		25	1
Practical classes (C)		105	4
e-learning (e-L)		-	-
Practical classes (PC)		-	-
Work practise (WP)		-	-
Unassisted student's work			
Preparation for classes and completions		75	3
3. COURSE OBJECTIVES			
O1	Organization of dental worksite, basics of ergonomics		
O2	Performing an extraoral and intraoral examination of a dental patient		
O3	Prophylaxis, diagnosis and treatment of carious and non- carious lesions of dental tissues		
O4	Learning basic endodontic concepts		
O5	Communication with dental patient		
4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING			
Code and number of effect of learning in accordance with standards of learning	Effects in time		
Knowledge – Graduate* knows and understands:			
F.W2.	principles of prophylactics and treatment of masticatory apparatus diseases at different stages of development		
F.W3.	viral, bacterial and fungal flora of the oral cavity and its importance		
F.W4	symptoms, course and management of specific diseases of the oral cavity, head and neck in different age groups		

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F.W5.	procedure for pulp diseases and mineralised dental tissues and injuries to teeth and face bones
F.W6.	procedure for periapical tissue diseases
F.W7.	morphology of dental cavities and principles of endodontic treatment and instruments used in this treatment
F.W14.	methods of masticatory apparatus rehabilitation
FW.19.	pathomechanism of the impact of oral diseases on general health
FW.20.	pathomechanism of the impact of systemic diseases or applied therapies on the oral cavity
F.W21.	prevention of oral disease
F.W22.	procedure for diseases of masticatory apparatus tissues, injuries to teeth and jaw bones
FW.23.	characteristics of dental care for patients with systemic diseases and the principles of cooperation with the physician managing the primary condition
C.W23.	dental office equipment and instruments used in dental procedures
EW.2.	fundamental methods of clinical examination and the role of additional diagnostic tests in the diagnosis, monitoring, prognosis, and prevention of organ-specific and systemic disorders, with particular emphasis on their impact on oral tissues.
G.W18.	principles of ergonomic organisation of work in a dental office and conducting dental procedures

Skills– Graduate* is able to:

F.U1.	conduct a medical interview with the patient or their family
F.U2.	conduct a dental physical examination of the patient
F.U3.	explain the symptoms to the patient, determine the method of treatment confirmed by the patients informed consent
F.U4.	deliver prognostic information indicating an adverse clinical outcome to the patient or their family
F.U6.	interpret results of additional tests and consultations
F.U7.	determine indications and contraindications for a specific dental procedure
F.U11.	keep current patient records, make referrals for dental and general medical
F.U14.	assess the risk of dental decay using bacteriological and saliva tests

5. ADDITIONAL EFFECTS OF LEARNING

Number of effects of learning	Effects of learning in time
Knowledge – Graduate knows and understands:	
-	-

Skills– Graduate is able to:		
-		
Social Competencies – Graduate is ready for:		
-		
6. CLASSES		
Form of class	Class contents	Effects of Learning
Lectures	W.1. The role of saliva in maintaining oral homeostasis <i>The role of individual components of saliva in maintaining oral health, disorders of saliva secretion - methods of treatment, saliva as a diagnostic medium</i>	E.W2., F.W3., F.W4., F.W19., F.W20.
	W.2. Current concepts of pathomechanism and controlling of carious disease <i>Carious lesion and carious disease, dynamics of de- and remineralization processes, biological and socioeconomic factors of caries aetiology, methods of carious process control, active and arrested carious lesions</i>	F.W2., FW3., F.W4.
	W.3. Epidemiology and prevention of dental caries <i>The role of epidemiological studies in health policy development, oral health monitoring, indicators, home and professional caries prevention in different groups of the adult population</i>	F.W2., F.W21.
	W.4. Caries diagnosis <i>Review and effectiveness of diagnostic methods, phenomena used in the detection of caries lesions, methods of caries risk assessment, choice of therapeutic management</i>	F.W4.
	W.5. Treatment of caries - non-invasive and restorative methods <i>Initial caries, remineralization phenomenon, products, indications for restorative treatment, MID principles for the treatment of carious lesions, current concept of cavitated caries treatment</i>	F.W4., F.W5., F.W14., F.W22.
	W.6. Caries disease in elderly population <i>Specification of the development and progression of caries process in elderly, prevention, diagnosis and treatment</i>	F.W2., F.W4., F.W21., F.W23.
	W.7. Non-carious lesions <i>Etiology, diagnostics, BEWE index, therapy</i>	F.W5., F.W22.
	W.8. Materials used in modern dentistry <i>Base and liner materials, restorative materials, biologically active materials, features, indications, advantages and disadvantages</i>	F.W4., F.W5.
	W.9. Diseases of the dentine-pulp complex and periradicular tissues <i>Etiology, symptomatology, classification, differential diagnosis</i>	F.W5., F.W6.
	W.10. Basics of endodontic treatment <i>Diagnosis and indications for root canal treatment, assessment and preparation of the treatment area, working under magnification</i>	F.W6., F.W7.
	W.11. Methods of root canal preparation <i>Phases of root canal treatment, preparation of the treatment field, bio-mechanical root canal preparation, recommended sequence of flushing agents application, manual and mechanical preparation methods - disadvantages, advantages, indications</i>	F.W5., F.W6., F.W7.

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	W.12. Filling of the tooth root canal system <i>Filling methods, indications, materials, systems available, advantages and disadvantages</i>	F.W7.
	W. 13. Credit test - course coordinator Verification of the knowledge gained during the lectures 25 questions, 3 distractors, 1 correct answer. Obtaining a minimum of 60% of the correct answers (15 questions) is obligatory to pass the test	E.W2., F.W3., F.W4., F.W6., F.W7., F.W14., F.W21., F.W22., F.W23.
Seminars	S.1. Introduction to the clinical classes conducted in the Department of Conservative Dentistry, <i>discussion of the rules of work in the Department and at the UCS, presentation of the conditions for passing the course, the use of equipment</i>	C.W23.
	S.2. Initial test – course coordinator <i>A colloquium testing students preparation for the start of clinical classes, based on the knowledge gained during the second year of studies - it has a test form - 25 questions, 3 distractors, 1 correct answer. Obtaining a minimum of 60% of the correct answers (15 questions) is obligatory to pass the test.</i>	Effects specified in the INTEGRATED PRECLINICAL LEARNING module (2 year of the study)
	S.3. The basics of ergonomics in a dental team <i>Dental team, ergonomics of 4 and 6 hand work position, working in magnification, isolation of the treatment area, working with rubber-dam</i>	G.W18.
	S.4. Phases of caries development in enamel and dentine <i>Features of initial caries, microscopic structure of the caries focus limited to enamel, infected and noninfected dentine, microscopic structure of the caries focus located in dentine</i>	F.W4.
	S.5. Classification of carious lesions <i>Classification of carious lesions according Black, Mount and Hume as modified by Lasfargues, Kaleka and Louis, ICDAS II Classification, ICCMS, active and arrested caries</i>	F.W4.
	S.6. Caries risk assessment <i>Risk factors, Cariogram, Cambra, (ICCMS™)</i>	F.W4.
	S.7. Prophylactic recommendations for caries in adult patients of different age groups <i>Prevention dedicated to young adults, senior patients, development of prophylactic indications</i>	F.W2., F.W21.
	S.8. Non-invasive treatment of caries <i>Plaque control, methods to stop the progress of the carious process, remineralization of carious lesions - methods, agents, infiltration of carious lesions, fissure sealants in caries therapy</i>	F.W4.
	S.9. The MID concept in caries treatment <i>options for minimally invasive caries treatment - techniques, systems, indications, contraindications, advantages and disadvantages</i>	F.W14.
	S.10. Principles of proximal surfaces restoration - the importance of correct proximal surfaces reconstruction for the functioning of the dental system, types of matrix systems, moulds and systems for the reconstruction of proximal surfaces	F.W14.
	S.11. Modern methods of deep caries treatment Aim of restorative therapy, current views on elimination of carious tissues, selective and non-selective methods of elimination of carious dentin, the role of adhesion in restorative treatment	F.W4., F.W14, F.W22.
	S.12. Oral halitosis Etiology, classification, epidemiology, treatment	F.W3., F.W4.

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S.13. Credit test- organized by the course coordinator The test includes the knowledge presented at the seminars - 25 questions, 3 distractors, 1 correct answer. Obtaining a minimum of 60% of the correct answers (15 questions) is obligatory to pass the test. A student who fails the course test can sit a retake. The second term is organized in written or oral form. If a student fails the 1st and 2nd term, then the final chance would be an oral test with the Head of the department at a prearranged time.	F.W2., F.W3., F.W4., F.W14., F.W21. F.W22., G.W18.
S.14. Dentin hypersensitivity Etiopathogenesis, mechanism, prevention, treatment	F.W2., F.W4.
S.15. Basics of adhesive restorations of tooth tissues Aims of tooth restoration, preparation principles, restoration of tooth surface integrity, restoration of function and aesthetics, preservation of healthy, living dental pulp, clinical aspects of cavity filling with adhesive materials, methods of compensating polymerization shrinkage	F.W4.
S.16. Glassionomers and their modifications in dental practice Chemical structure, division, modification, range of effect of fluoride ions contained in the GIC, advantages and disadvantages	F.W4.
S.17. Overview of dental composite materials, indications, protocol of treatment Division: Compomers, giomers, ormocers, composites, compobonds, indications, advantages and disadvantages, protocols, application techniques	F.W4.
S.18. Pathology of the dental pulp symptomatological-therapeutical classification of pulp inflammations, classification of pulp diseases according various classification, reversible and irreversible pulpitis	F.W5.
S.19. Pathology of periapical tissues Factors causing inflammation of periapical tissues, classification, diagnosis, treatment, discussion of clinical cases	F.W6.
S.20. Morphology of dental pulp chambers in terms of endodontic procedures. Location of the trepanation point in different groups of teeth. Anatomy of the pulp and dentin complex. Location of canal orifices, lateral and accessory canals.	F.W7.
S.21. Biomechanical preparation of the canal system Aims of biomechanical canal preparation, elimination of canal biofilm, working methods and techniques	F.W5., F.W7.
S.22. Root canal filling methods and techniques The influence of proper canal system obstruction on the prognosis of treatment, control methods, indications for revision of canal treatment	F.W5., F.W6., F.W7.
S.23. Discussion about clinical cases. Part 1. Presentation of cases with a detailed discussion of the disease history, differential diagnosis, treatment plan proposal, therapeutic procedure and prognosis	C.W23., E.W2., F.W2., F.W3., F.W4., F.W5., F.W6., F.W7., F.W14., F.W21., F.W22., F.W23., G.W18.

	S.24. Discussion about clinical cases. Part 2. Presentation of cases with a detailed discussion of the disease history, differential diagnosis, treatment plan proposal, therapeutic procedure and prognosis	C.W23., E.W2., F.W2., F.W3., F.W4., F.W5., F.W6., F.W7., F.W14., F.W21., F.W22., F.W23., G.W18.
	S.25. Verifying credit test - organized by the course coordinator The test includes the knowledge presented at the seminars - 25 questions, 3 distractors, 1 correct answer. Obtaining a minimum of 60% of the correct answers (15 questions) is obligatory to pass the test. A student who fails the course test can sit a retake. The second term is organized in written or oral form. If a student fails the 1st and 2nd term, then the final chance would be an oral test with the head of the department at a prearranged time.	C.W23., E.W2., F.W2., F.W3., F.W4., F.W5., F.W6., F.W7., F.W14., F.W21., F.W22., F.W23., G.W18.
Clinical Classes	C- Working in the dental team, according to the principles of ergonomics, subjective and physical examination of the patient, assessment of the risk of caries and establishing a treatment plan, performing prophylactic procedures in hard dental tissues, diagnosis and treatment of caries and non-carious lesions, keeping medical records. Topics of practical classes * C1. Principles of work in the Department of Conservative Dentistry, maintenance of current patient records in the KS-Somed program, application of updates. C2. - C3. Performing prophylactic and therapeutic procedures in simulation conditions. C4.- C8. Physical examination of the oral cavity including potentially malignant conditions, communication with the dental patient. C9. - C 20. Planning and execution of preventive and therapeutic procedures in healthy patients burdened with systemic disease. C21. - C30. Planning and performing preventive and therapeutic procedures in senior patients. * Procedures performed during individual exercises are adapted to the preventive and therapeutic needs of patients participating in clinical classes.	C.W.23, E.W2., F.W2., F.W3., F.W4., F.W5., F.W6., F.W7., F.W14.,, F.W21., F.W22., F.W23., G.W18., F.U1., F.U2., F.U3., F.U4., F.U6., F.U7., F.U11., F.U14.
7. LITERATURE		
Obligatory		
1. Sturdevant's Art and Science of Operative Dentistry, 7th edition, Roberson T.M., Heymann H.O., Swift E.J., Mosby, St. Louis 2018, 2. Essentials of Dental Caries. Fourth Edition Edwina Kidd and Ole Fejerskov, Oxford University Press, Oxford 2016 3. Clinical endodontics: a textbook. Tronstad L., 3rd edition, Georg Thieme Verlag, 2009 4. Textbook of Endodontology, Bjørndal L., Kirkevang L-L., Whitworth J., 3rd Edition Wiley-Blackwell, 2018		
Supplementary		
1. Pickard's Guide to Minimally Invasive Operative Dentistry, Avit Banerjee A., Watson T.F., 10th Edition, Oxford University Press, 2015 2. Dental Caries: The Disease and its Clinical Management, Fejerskov O Nyvad B, Kidd E. 3rd Edition, Wiley-Blackwell, 2015 3. Pathways of the Pulp, Berman L.H., Hargreaves K.M., 12th edition, Elsevier, 2020, 4. Endodontics, principles and practice, Torabinejad M., Walton R.E., 5th Edition, Saunders Elsevier, 2009		
8. VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
C.W23, E.W2., F.W2., F.W3., F.W4., F.W5.,	Entering clinical classes is possible after passing the entrance test, verifying the consolidation of knowledge acquired during the pre-clinical classes, conducted	Multiple-choice quizzes (entrance, verifying

F.W6., F.W7., F.W14., F.W19, F.W20, F.W21., F.W22., F.W23., G.W.18., F.U1., F.U2., F.U3., F.U4., F.U6., F.U7., F.U11., F.U14.	<p>in the second year of study as part of the implementation of the module: integrated pre-clinical teaching.</p> <p>The condition for passing the clinical classes is a positive evaluation of the clinical teacher, confirming the acquisition of the ability to perform specific procedures, reliable maintenance of medical records and a proper attitude towards the patient and medical staff.</p> <p>The condition for passing lectures and seminars is attendance at lectures, active participation in seminars, passing colloquia in the field of knowledge presented at lectures and seminars</p> <p>Credit for the course is given on the basis of active participation in seminars, passing the colloquium in the field of knowledge presented at lectures and seminars, as well as after receiving a positive evaluation from the teacher who conducts clinical classes.</p> <p>Attendance at lectures, seminars and exercises is mandatory.</p> <p>During the academic year, 2 absences from exercises justified by a medical exemption are allowed. Additional absences from exercises, confirmed by a medical exemption, require making up the classes. The date and form of credit for the exercises should be determined individually with the teacher of the class.</p>	<p>knowledge from lectures and seminars) consist of 25 questions - 3 distractors and 1 correct answer.</p> <p>Passing requires 60% correct answers (15 points).</p> <p>Grading scale: 15-16 points - 3 17-18 points - 3.5 19-21 points - 4 22-23 points - 4.5 24-25 points - 5</p>
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9. ADDITIONAL INFORMATION

1. The knowledge conveyed in lectures and seminars includes new information and concepts and is assessed in quizzes and the final exam.
2. In order to complete the course, it is necessary to pass the clinical classes, pass the colloquium of seminars and lectures. The first term of the colloquium is in the test form. The second term of the colloquium - oral (or test) credit - at the teaching assistant. In case of failure to pass the 1st and 2nd terms- the final, 3rd way of verifying knowledge is an oral colloquium at the head of the Department, by prior arrangement. A negative result of the colloquium will result in failure of the course.
3. It is required to report to classes on time, comply with sanitary requirements for procedures and personal protective equipment, do not use cell phones during classes.
4. Student Scientific Circle at the Department of Conservative Dentistry, Medical University of Warsaw. Circle supervisor: Dr. n. med. Ewa Rusyan - email: ewa.rusyan@wum.edu.pl.
5. Contact: Department of Conservative Dentistry, Medical University of Warsaw, Binieckiego 6, 02-097 Warsaw. Tel.: 22 116 64 46. E-mail: sekretariat.zachowawcza@wum.edu.pl
6. The supervisor of the course is Anna Kwiatkowska DDS - anna.kwiatkowska@wum.edu.pl

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ATTENTION

The final 10 minutes of the last class of the block/semester/year should be allotted for students to fill out the Survey of Evaluation of Classes and Academic Teachers